

### Abstract

An emulsion pump mainly comprises a piston rod, a pressing head, a screw-topped sleeve, a cylinder, a spring, a rubber pipe and a gasket. Among them, the upper screw thread of the cylinder engages with a screw thread portion of the screw-topped sleeve. The width of the teeth of the upper end screw thread of the cylinder is  $A$ , the width of the gullet the screw thread portion of the screw-topped sleeve which is connected with the screw thread of the cylinder is  $B$ , and  $B$  is greater than  $A$ , thereby a gap exists between them; in addition, a gap is also formed between the contact surface of the upper end of the cylinder and the lower surface of the top portion of the screw-topped sleeve, thereby an air channel for preventing liquid entrance is formed in the emulsion pump.